

THURSDAY, DECEMBER 6, 1894.

## PECULIARITIES OF PSYCHICAL RESEARCH.

*Apparitions and Thought Transference.* By Frank Podmore, M.A. (London: Walter Scott, 1894.)

MR. PODMORE, in the opening chapter of this popular exposition of telepathy, pleads for the recognition of psychical research by the general body of scientific workers. He reminds us of the opposition geological and biological discoveries have encountered, and ventures to compare the circumstances of the small group of investigators with which he is connected, and more particularly the prejudice and derision they encounter, with the experiences of Cuvier and Agassiz. Convincing as this comparison may appear to the general reader, in one respect at least it fails. Three hundred years ago, all these phenomena of crystal gazing, thought transference, and apparitions had a broader basis of belief than they have to-day; even a hundred years ago, the ordinary scientific investigator was at little or no advantage over the exponent of magic arts. But though, as Mr. Podmore reminds us, the leading propositions of natural science once encountered popular prejudice, ridicule, contempt, hatred, far more abundantly than has ever been the lot of psychical interpretations, they have won through and triumphed, while the credit accorded such evidence as the S.P.R. accumulates has, if anything, diminished. A thing Mr. Podmore scarcely lays sufficient stress upon is the fundamental difference in the quality of the facts of "psychical research," as distinguished from those of scientific investigation—using scientific in its stricter sense. It is true he has, with an appearance of frankness, devoted a chapter to "special grounds of caution," in which he concedes the truth of various criticisms, and owns to several undeniable impostures; but even here he passes from admissions to a skilful argument in favour of telepathy, and avoids the cardinal reason for keeping aloof from this field of inquiry, that lies in the quality of the evidence.

The scientific advances of Cuvier and Agassiz, like all true scientific discoveries, were based upon things that could be perceived directly by themselves, and which could be reproduced whenever required, and completely examined under this condition and that, by those who doubted the facts. That is the essential difference between natural science and such a subject as history; science produces its facts, history at best produces reputable witnesses to facts. Scientific men have never attached much importance to unverifiable statements, however eminent the source. If, to suppose an instance, the greatest living anatomist were to announce that he had dissected a dogfish and discovered lungs therein, adduce his wife, a local general practitioner, two servants, and a lady "named Miss Z." in evidence, and add that he had lost the specimen, there can be scarcely any doubt that, in spite of his position and his character, the science of anatomy would remain exactly where it was before his discovery was proclaimed. But in this "psychical research" the deliberate reproduction of phenomena under conditions that admit of exhaustive sceptical examination appears to be generally impossible, and we are re-

peatedly asked to form opinions on the hearsay of Mr. Podmore and his fellow-investigators.

This is not all. Few of the phenomena are directly observed. Dr. Dee had his Kelly, Prof. Oliver J. Lodge his Mrs. Piper. If Prof. Sedgwick would read the thoughts of Prof. Oliver J. Lodge, or—as a phantasm of the living—take to haunting some sceptical person, we should have at least a statement at first hand, to doubt; but as it is, these investigators manifest, as a rule, no other mental phenomena than belief and repetition. Reading through Mr. Podmore's book, the student will be struck by the fact that the persons who are in immediate contact with the alleged phenomena, the hireling eyes of the psychological inquirer, are persons usually youthful and coming from a social level below that of the investigators. Take, for instance, the Guthrie cases, to which Mr. Podmore attaches considerable importance. Mr. Guthrie is a draper in Liverpool, and by some means, not stated, he became aware of psychic powers possessed by two of his employees—young ladies—whose identity is for some reason veiled under the initials "E." and "R." These young ladies were accordingly liberated at intervals from the toils of shop or workroom, and made the subjects of various experiments; Mr. Guthrie, for instance, putting cayenne pepper in his mouth, during a profound silence, and Miss E. experiencing a taste of "mustard." Now we must insist upon the fact, because it seriously affects this question of evidence, that to a young lady following the irksome and precarious calling of a draper's assistant, the manifestation of psychic gifts opens up eminently desirable possibilities and interests. Then, among other of these intermediaries, we find "Jane"—a pitman's wife—"Bertha J.," a peasant woman, hospital nurses and out-patients, two men "who had been subjects of an itinerant lecturer upon hypnotism," most of the letters of the alphabet, several American M.D.'s, lady medical students, a baker's assistant, Mr. P., "a clerk in a wholesale house, aged nineteen, who possesses a good deal of humour," and so forth.

Scarcely ever is the medium a person really independent, in a financial sense, of the investigators who are craving for phenomena. It is necessary for us to believe in the general good faith of this extremely dubious material, or in the adequacy of the precautions against fraud taken by persons whose scientific reputations are now hopelessly bound up with the reality of the alleged facts, before one can even begin to accept the experimental basis upon which the theory of telepathy rests. And this is the character of the investigations that Mr. Podmore has compared with the work of Cuvier and Agassiz! In no other field of inquiry is so much faith in personal character and intelligence demanded, or so little experimental verification possible. Indeed, the book is oddly suggestive in places, with its use of initials and second-hand guarantees of character, of the testimony one finds adduced in favour of patent medicines.

Now, to the attentive reader of Mr. Podmore, the persuasion is unavoidable that the ordinary psychical investigator is endowed with a considerable facility of belief, and is by no means instinct with the scientific method. And this, where we are to take very much on faith, is a material consideration. Anonymous statements

are accepted, and not only anonymous but self-contradictory ones. Mrs. Piper hypnotised, personated a French physician Dr. Phinuit, who did not know French, and failed to give a satisfactory account of himself. Mrs. Piper, during her trance as Dr. Phinuit, gabbled, made chance shots, "fished" for information, and was generally a transparent enough imposition. Yet she occasionally spoke of things she could not, according to the investigators, have obtained a knowledge of by ordinary means. For that they give her credit, and forgive all her failures. Prof. Lodge, apparently eager to believe, compares her utterances to the experience of anyone listening at a telephone: "you hear the dim and meaningless fragments of a city's gossip till back again comes the voice obviously addressed to you, and speaking with firmness and decision." Imagine in a real scientific inquiry an investigator pursuing a theory through a complicated series of observations, arbitrarily selecting those that advance his views, and calling the others "dim and meaningless until back comes the result obviously addressed to you!"

As one instance of the absence of scientific method from these discussions, take M. Richet's and Mr. Gurney's experiments with cards. In these experiments an agent looked at the card, and a percipient guessed the suit. M. Richet conducted 2927 trials, and 789 correct guesses were made, the theory of probability only granting 732. The S.P.R. trials numbered 17,653, with 4760 successes—347 in excess of the probable number. Now this is adduced by Mr. Podmore as evidence for telepathy; we are asked to believe that about once in sixty times—that is the excess above the probable ratio of successes—the mental impression of the agent recorded itself upon the brain of the percipient. Whether during the interval of fifty-nine trials telepathy was in abeyance, Mr. Podmore does not say, and the failure of the American S.P.R. to confirm these results he sets aside because the details of their experiments are not given—an excellent example to the sceptic. Are we to believe that only once in sixty times did the transferred thought surge up into consciousness, or that the transference occurs only at the sixtieth time, or what? A most obvious collateral test seems to have been altogether overlooked, namely, for someone to guess cards *before* the agent saw them, and so to ascertain how far pure haphazard guessing of this kind, or guessing on any particular gambler's "system," may fall away from the theory of probability. The deductions of the theory of probability, be it remembered, become certainties only when the number of cases is infinite. We have no grounds for assuming that in seventeen thousand or seventy thousand, or in any finite number of cases, facts come into coincidence with this theory. In an infinite number of sets of 17,653 trials we might have every possible divergence from the average result up to 17,653 successive failures or 17,653 successive successes. Taking a number of sets, they may be expected to fluctuate round a mean result in agreement with the theory of probability—that is all. These three sets of experiments manifestly prove nothing. And this is how Mr. Podmore prefaces his account of them: "In the following cases, where the exact nature of the impression received was not apparently classified by the percipient, it may be presumed to have been either of a visual or

an auditory nature." He begs the question, and in a book addressed to the untrained mind of the general reader! Nothing could show more clearly the tendency of this psychical research to accept as evidence what is really not evidence at all, its lack of critical capacity and severe confirmatory inquiry, and the missionary spirit of its exposition.

Enough has been said to show the essential difference between "psychical" and scientific investigations, and to justify the attitude of scepticism. After all, that scepticism does nothing to hamper Mr. Podmore and his associates from collecting their evidence, clarifying their opinions, and building up such a defensible case as their peculiar circumstances permit. And be it remembered the scientific man of to-day occupies a responsible position, that he possesses even a disproportionate share of the public confidence, because of his reputation for sceptical caution. The public mind is incapable of the suspended judgment; it will not stop at telepathy. Any general recognition of the evidence of "psychical" research will be taken by the outside public to mean the recognition of ghosts, witchcraft, miracles, and the pretensions of many a shabby-genteel Cagliostro, now pining in a desert of incredulity, as undeniable facts. Were Mr. Podmore's case strong—and it is singularly weak—the undeniable possibility of a recrudescence of superstition remains as a consideration against the unqualified recognition of his evidence.

H. G. WELLS.

#### THE BEGINNINGS OF HISTORY.

*The Dawn of Civilisation—Egypt and Chaldæa.* By G. Maspero. Edited by A. H. Sayce. Translated by M. L. McClure. (London: Society for Promoting Christian Knowledge, 1894.)

AS the winter season advances, and folk begin to wend their way to Egypt, the enterprise of authors and publishers keeps up a steady supply of good literature concerning the country which, since the English occupation in 1882, has exercised upon people of all nations a fascination which may be described as marvellous. Only a few weeks ago an English translation of Dr. Erman's *Aegypten* appeared, and already we have before us a translation of a very important work by Prof. Maspero in the same language. Both works are excellent, but each is typical of the nationality of its writer, and is really addressed to a different class of readers. The work of Dr. Erman possesses a minuteness of detail characteristic of the true German student, laborious and accurate, while that of M. Maspero, though no less accurate, discusses facts on a large scale with due reference to everything which bears upon them, and contains generalisations which all thoughtful readers will accept with gratitude; added to this, we have the light and easy style and logical arrangement of facts and sentences which are the type of the work of the French master of his subject. In short, Dr. Erman's book will form a standard work of reference for the student of Egypt; but that of M. Maspero will take its place as a general history of early Oriental civilisation on the banks of the Nile, Tigris, and Euphrates, and in the countries which lie between.